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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,400	06/20/2001	Dennis Murphy	DIVER1120-4	4902

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EXAMINER

RAMIREZ, DELIA M

ART UNIT	PAPER NUMBER
1652	7

DATE MAILED: 02/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

09/886,400

Applicant(s)

MURPHY ET AL.

Examiner

Delia M. Ramirez

Art Unit

1652

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-92 is/are pending in the application.

4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) Claim(s) ____ is/are allowed.

6) Claim(s) ____ is/are rejected.

7) Claim(s) ____ is/are objected to.

8) Claim(s) 1-92 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. ____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.

4) Interview Summary (PTO-413) Paper No(s) ____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-23, 40-41, 67-85, drawn to the polynucleotide of SEQ ID NO: 3, probes comprising a fragment of said polynucleotide, and a method of expressing said polynucleotide, classified in class 536, subclass 23.2.
 - II. Claims 24-35, 64, 86-87, drawn to the polypeptide of SEQ ID NO: 4 and a preparation comprising said polypeptide, classified in class 435, subclass 208.
 - III. Claims 36-39, drawn to antibodies that specifically bind the polypeptide of SEQ ID NO: 4, classified in class 530, subclass 387.1.
 - IV. Claim 56, drawn to a computer readable medium, classified in class 711, subclass 4.
 - V. Claims 57-60, drawn to a computer system, classified in class 717, subclass 11.
 - VI. Claims 42-55, drawn to a method of generating a variant of SEQ ID NO: 3, classified in class 435, subclass 440.
 - VII. Claims 61-63, drawn to a method for comparing sequences, classified in class 707, subclass 3.
 - VIII. Claim 65, drawn to a method of catalyzing the hydrolysis of saccharides using the polypeptide of SEQ ID NO: 4, classified in class 435, subclass 18.
 - IX. Claim 66, drawn to an assay for detecting fragments or variants of SEQ ID NO: 4, classified in class 435, subclass 18.

X. Claim 88-92, drawn to a method for modifying small molecules using the polypeptide of SEQ ID NO: 4, classified in class 435, subclass 18.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II, III, IV, or V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case Inventions I-V each comprise a chemically unrelated structure capable of separate manufacture, use, and effect. The DNA in Invention I comprises a nucleic acid sequence, the proteins of Inventions II and III each comprise an unrelated amino acid sequence, the computer readable medium is a device used to record electronic data, and a computer system is an electronic device capable of retrieving, storing, and processing data. The DNA has other uses besides encoding the protein of Invention II, such as a hybridization probe or in gene therapy. The protein from Inventions II can be used in materially different methods other than to make the antibodies of Inventions III, such as in therapeutic or diagnostic methods (e.g. in screening). Further, the protein of Invention II can be prepared by processes which are materially different from recombinant DNA expression of Invention I such as by chemical synthesis, or by isolation and purification from natural sources. The computer readable medium of Invention IV or the computer system of Invention V are not related to the DNA of Invention I or the proteins of Inventions II-III in regard to structure, use or effect.

3. Inventions I and VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product

as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the DNA of Invention I can be used in the method of Invention VI and to make the protein of Invention II.

4. Inventions II and VIII-X are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the protein of Invention II can be used in the distinct methods of Inventions VIII, IX, or X.

5. Inventions IV-V and VII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the computer readable medium of Invention IV and the computer system of Invention V can be used in the method of Invention VII.

6. Inventions VI and VII-X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the methods of Inventions VI-X are not disclosed as capable of use together, comprise different steps, utilize different products, and produce different results.

7. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement can be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Certain papers related to this application may be submitted to Art Unit 1652 by facsimile transmission. The FAX number is (703) 308-4556. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6(d)). NOTE: If Applicant submits a paper by FAX, the original copy should be retained by Applicant or Applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED, so as to avoid the processing of duplicate papers in the Office.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delia M. Ramirez whose telephone number is (703) 306-0288. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Ponnathapura Achutamurthy can be reached on (703) 308-3804. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Delia M. Ramirez, Ph.D.
Patent Examiner
Art Unit 1652

DR
February 24, 2002



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